

**DECLARATION AND POWER OF ATTORNEY  
FOR APPLICATION FOR UNITED STATES PATENT**

As a below named inventor, I hereby declare that:

my residence, post office address and citizenship are as stated below under my name;

I verily believe I am the original, first and sole (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

A METHOD AND APPARATUS FOR DETERMINING THE MASS FLOW THROUGH AN ENGINE

described and claimed in the specification:

Check one

\*a ☐ attached hereto  
b ☐ filed on \_\_\_\_\_

as Application Serial No \_\_\_\_\_

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations §1.56. Under Title 35, US Code §119, the priority benefits of the following foreign application(s) filed within one year prior to this application are hereby claimed:

GREAT BRITAIN PATENT APPLICATION NO 0303639.9  
FILED 18 FEBRUARY 2003

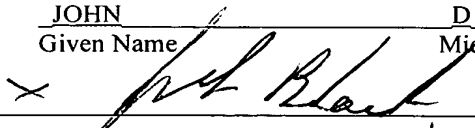
The following application(s) for patent or inventor's certificate on this invention were filed in countries foreign to the United States of America either (a) more than one year prior to this application, or (b) before the filing date of the above-named foreign priority application(s):

I hereby appoint the following as my attorneys of record with full power of substitution and revocation to prosecute this application and to transact all business in the Patent Office:

James A Oliff, Reg No 27,075; William P Berridge, Reg No 30,024;  
Kirk M Hudson, Reg No 27,562; Thomas J Pardini, Reg No 30,411; and  
Edward P Walker, Reg No 31,450; Robert A Miller, Reg No 32,771 and  
Mario A Costantino, Reg No 33,565

**ALL CORRESPONDENCE IN CONNECTION WITH THIS APPLICATION SHOULD BE SENT TO OLIFF & BERRIDGE PLC, PO BOX 19928, ALEXANDRIA, VIRGINIA 22320, TELEPHONE (703) 836-6400.**

I hereby declare that I have reviewed and understand the contents of this Declaration, and that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

|   |  |   |   |                                 |
|---|--|---|---|---------------------------------|
| 1 | Typewritten Full Name<br>of Sole or First Inventor | <u>JOHN</u><br>Given Name   | <u>D</u><br>Middle Initial                | <u>BLACK</u><br>Family Name     |
| 2 | Inventor's Signature                               |                |   |                                 |
| 3 | Date of Signature                                  | <u>January 8<sup>th</sup>, 2004</u>   |   |                                 |
|   | Residence  | <u>ASHBOURNE</u><br>City  | <u>GREAT BRITAIN</u><br>State or Province | <u>GREAT BRITAIN</u><br>Country |
|   | Citizenship  | <u>BRITISH</u>  |   |                                 |
|   | Post Office Address                                | <u>BLUEBELL COTTAGE, CREAMERY LANE, PARWICH, ASHBOURNE, DERBYSHIRE DE6 1QB,<br/>GREAT BRITAIN</u> |   |                                 |

\*If Box a is checked, this form may be executed only when attached to the specification (including claims) at the end thereof.  
Note to Inventor: Please sign name on line 2 exactly as it appears in line 1 and insert the actual date of signing on line 3.

IF THERE IS MORE THAN ONE INVENTOR USE PAGE 2 AND PLACE AN "X" HERE ☐